# THEMIGRANI

A QUARTERLY JOURNAL DEVOTED TO TENNESSEE BIRDS

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# THE MIGRANT

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All TOS members receive *The Migrant* and the *TOS Newsletter*, *The Tennessee Warbler*. The *Newsletter* carries information about meetings, forays, and club activities. Items for the *Newsletter* should be sent to its Editor, Charles P. Nicholson, Box 402, Norris, TN 37828.

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# THE MIGRANT

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VOL. 50

DECEMBER, 1979

NO. 4

# NOTES ON SUMMER BIRDS OF THE CANADIAN ZONE FOREST OF ROAN MOUNTAIN

RICK A. PHILLIPS

Throughout the nesting season of 1977 Fred J. Alsop, III, Tom F. Laughlin, and I (RAP) made a number of visits to the spruce-fir belt on Roan Mountain along the Mitchell County, North Carolina—Carter County, Tennessee border. Birds observed during our visits are listed in Table 1. During the course of our field work in the Canadian zone woodlands we visited areas ranging from mature spruce-fir stands to a rather unique localized area of much young second growth along a small graveled road just below the rhododendron gardens near the summit of the mountain. This area is used as a Christmas tree seedling area by Mitchell County, North Carolina. The vegetation of this area, at an elevation of approximately 5,400 feet, consists of many small (averaging 7 feet in height) and a few randomly scattered large mature Fraser Fir (Abies fraseri) and Red Spruce (Picea rubens). This section proved to be the most attractive to some uncommon species not usually present during the nesting season. The material which follows is a summary of some notes on the more uncommon birds found during our visits.

Goshawk—A large accipiter appeared in the seedling area on 29 August at about 2:00 p.m. (EDT) as Laughlin and I were looking for Red Crossbills. The bird sailed by 200 yards away and stood out well against a background of evergreens. It flew for about 500 yards and landed in a large dead tree. I was able to approach carefully to within 50 yards of the hawk for a closer look. The large size, light supercillary stripe, light finely barred breast, coupled with our view of the bird's slaty-blue back in flight served to confirm our initial identification, that the bird was an adult Goshawk. As I attempted to move even closer, it flew and was not seen again. I know of no summer records of the Goshawk from Roan Mountain, and the bird is regarded as of rare occurrence in any season.

Sharp-shinned Hawk—A female of this species was present in the seedling area for the duration of our visits and on 21 August, Laughlin and I observed the flight display of a male and female in the same area. The male appeared much smaller, half the size of the female, and was constantly above her as they performed a variety of aerial maneuvers high above the forest. This pair of birds probably nested in the immediate vicinity.

Cooper's Hawk—Laughlin and I sighted an immature female of this species in the seedling area on the afternoon of 21 August.

TABLE 1 BIRDS OBSERVED ON ROAN MOUNTAIN, TENNESSEE-NORTH CAROLINA DURING JUNE AND AUGUST, 1977.

|  | JUNE |      |    |     | AUGUST |     |     |      |     |
|--|------|------|----|-----|--------|-----|-----|------|-----|
| SPEC1ES  | 16   | 17   |    | 25  | 26     | 29  |     | 28   | 29  |
| Goshawk (Accipiter gentilis)                         |      |      | -  |     |        |     |     |      | -   |
| Sharp-shinned Hawk (Accipiter striatus)              | 1    | 1    | 1  | 1   |        | 1.  | 2   |      |     |
| Cooper's Hawk (Accipiter cooperi)                    | - 5  | -    | -  |     |        |     | 1   |      |     |
|  |      |      |    |     |        |     |     |      |     |
| Red-tailed Hawk (Buteo jamaicensis)                  |      |      |    |     |        | 1   | 1   |      |     |
| Ruffed Grouse (Bonasa umbellus)                      |      |      |    |     |        |     |     | 3    |     |
| Chimney Swift (Chaetura pelagica)                    |      |      |    |     |        | 10  |     |      |     |
| Ruby-throated Hummingbird (Archilochus colubris)     | 9    | 15   | 12 | 3:  | 1      | 12  | 12  | 9    | 18  |
| Hed-headed Woodpecker (Melanerpes erythrocephalus)   |      |      | 1  |     |        |     |     |      |     |
| Olive-sided Flycatcher (Nuttallormis borealis)       |      | 2    | 1  |     |        |     |     | 1    |     |
| TOTAL TITLE IN THE TOTAL IN CONTRACTOR CONTRACTOR    |      | - 65 |    |     |        |     |     |      |     |
| Rough-winged Swallow (Stelgidopteryx ruficollis)     |      |      |    |     |        | 4   |     |      |     |
| Barn Swallow (Wirundo rustica)                       |      |      |    |     |        | 6   |     |      |     |
| Blue Jay (Cyanocitta cristata)                       |      |      | 1  |     |        |     |     |      |     |
| Common Raven (Corvus corax)                          |      |      |    |     |        | 2   |     |      |     |
| Red-breasted Nuthatch (Sitta canadensis)             |      | 1    |    |     |        | 100 |     | 6    | 8   |
| Brown Creeper (Certhia familiaris)                   |      |      | 3  |     |        |     |     |      | - 3 |
|  |      |      |    |     |        |     |     |      |     |
| Winter Wren (Troglodytes troglodytes)                | 2    | 6    | 4  | 2   | 1      |     | 1   | 1    | - 1 |
| Gray Cathird (Dumetella carolinensis)                | 1    | 3    | 1  | 1   | 1      | 2   | 1   | 3    | 2   |
| American Robin (Turdus migratorius)                  | 2    | 1    |    |     |        |     |     |      |     |
| Veery (Catharus Euscescens)                          | 6    | 4    | В  | 6   | 4      | 2   |     | 2    | 2   |
| Golden-growned Kinglet (Regulus satrapa)             | 2    | 4    | 1  | 1   | 1      | 3   | 5   | 8    | 8   |
| Cedar Waxwing (Bombycilla cedrorum)                  | 2    | 4 2  | 3  | 3   | 3      | 3   | 3   | 4    | - 4 |
|  | -    |      |    | -   | ័      | -   |     | -    |     |
| Solitary Vireo (Vireo solitarius)                    | 3    | 3    | 2  | 1   | 1      | 1   |     |      | - 3 |
| Black-throated Blue Warbler (Dendroica caerulescens) |      |      |    |     |        |     | 50  | 10   | 50  |
| Black-throated Green Warbler (Dendroica virens)      |      |      |    |     |        |     | 50  | 28   | 50  |
| Blackburnian Warbler (Dendroica fusca)               |      |      |    |     |        |     | 50  | 24   | -50 |
| Canada Warbler (Wilsonia canadensis)                 | 3    | 3    | 6  | 5   | 2      | 2   |     | 2    | - 3 |
| Chestnet-sided Warbler (Dendroica pensylvanica)      | 8    | 6    | 12 | 6   | 6      | 3   | 10  | 18   | 22  |
| Purple Finch (Carpodacus purpureus)                  | 2    | 4    |    |     |        |     |     |      |     |
| Pine Siskin (Carduelis pinus)                        | 1    | -    | 4  |     |        | 6   | 2   | 1    | 3   |
| American Goldfinch (Carduelis tristis)               | 2    |      | 4  |     |        | 5   |     |      |     |
| Red Crossbill (Loxia curvirostra)                    | Q    | 0    | a  | 7   |        | 2   | 7   | 18   | 2:  |
| Song Sparrow (Melospiza melodia)                     | *    | 1    |    | - 4 |        | 4   | 1.5 | 4.13 | 4.4 |
| song sparrow therespiza merodia)                     |      | - 1  |    | -   |        |     |     |      |     |

Red-tailed Hawk—This bird was seen twice hunting along the graveled road which passes through the seedling area. No evidence of nesting was found.

Ruffed Grouse—Three young birds were recorded crossing the road which leads from Carver's Gap to the gardens area. In view of the Goshawk recorded 29 August I feel it noteworthy to mention that the Ruffed Grouse is one of the most important prey items in the diet of the Goshawk, especially females, in northern areas with habitat similar to that found in the spruce-fir on Roan.

Ruby-throated Hummingbird—This was found to be a common bird at all altitudes in the spruce-fir areas. I think it is interesting to point out that during a period of four years while employed at nearby Mt. Mitchell, North Carolina, where similar habitat to that found on Roan Mountain prevails, Burleigh (1941) states that "a female observed June 5, 1930, in open spruce woods at an altitude of approximately 5,000 feet marks the extreme limit to which this species ventures during the breeding season." Rhoads (1895) during a trip to Roan Mountain in June states, "not seen on top of Roan Mountain, but up to a high altitude, say 4,500 to 5,000 feet." The abundance of late blooming flowers found in second

growth areas would provide a ready supply of nectar upon which these birds feed themselves and their young. (These birds are comparatively late nesters, often producing young in late June and July.)

Red-headed Woodpecker—One individual was recorded flying through the seedling area. Burleigh (1941) stated that this species was of casual occurrence here, and only seen at irregular intervals during the spring and fall.

Olive-sided Flycatcher—Two individuals were seen perched in tall dead trees located in the seedling area. An immature Olive-sided Flycatcher was found perched in the top of a dead tree on 28 August near the site where the adults were recorded on 17 and 19 August, however, it is possible that this bird was a migrant. The Olive-sided Flycatcher is an uncommon summer resident in eastern Tennessee and western North Carolina. The only available nest record of this species in the Southern Appalachians is that of Williams (1974), who observed a nest in the Great Smoky Mountains National Park. Rhoads (1895) recorded this species 'passing down Rock Creek Valley on the northwest side of Roan Mountain . . . a narrow cove and the altitude about 4,000 feet.''

Common Raven—This large corvid was recorded but a single time during our visits to the area, however it is my opinion that there are from one to five resident individuals on the mountain.

Red-breasted Nuthatch—The population of the Red-breasted Nuthatch on Roan Mountain is variable, some years being a common bird and others hardly to be found. This variation seems to be correlated with the production of cones by the Fraser Fir and Red Spruce, an important food source of these birds. This species was all but absent during our visits up until 28-29 August when six and eight birds, respectively, were recorded. This shows a possible drift of birds from some nearby similar area.

Golden-crowned Kinglet—Contact was made with the species every trip, however, the overall population seemed to be low. Perhaps the harsh winter took its toll on these resident birds.

Black-throated Blue Warbler, Black-throated Green Warbler, and Blackburnian Warbler-These three species were entirely absent as nesting birds in the spruce-fir forest we examined. The absence of these birds in the spruce-fir area as nesting species is rather unexpected. Burleigh (1941) found the Black-throated Green Warbler, "a plentiful breeding bird in the thick fir and spruce woods on the top of Mt. Mitchell . . . " and a visit to the nearby Great Smoky Mountains finds this bird plentiful at altitudes and habitat similar to that found on Roan Mountain. This also holds true for the other two species in the Great Smoky Mountains (Alsop 1970). Burleigh (1941) found the Black-throated Blue Warbler, "a plentiful breeding bird in the cut over area to an altitude of approximately 6,000 feet." However, he stated of the Blackburnian Warbler, "although not known to breed above an altitude of approximately 5,000 feet, this species is fairly plentiful during the late summer in the fir and spruce woods at the top of the mountain . . . "Our observations led us to believe that all three species nested in apparently more suitable habitat at lower elevations and that some sort of vertical migration was responsible for their appearance in numbers later in the season.

Purple Finch—A male and female frequenting the seedling area was perhaps the most interesting observation of all. The male was identified by its song by Alsop, and later was observed to defend his territory from a Canada Warbler. No nest was discovered, but their presence in this habitat similar to that in which they nest farther north leads to speculation about possible nesting.

Pine Siskin—These birds are permanent residents and are assumed to breed somewhere in the area. They were seen frequently during our visits yet no nest or evidence of nesting was found.

Red Crossbill—On 16 June, Fred J. Alsop, Lois Carpenter, and I found a male and female of this species feeding in a large Fraser Fir. As the female fed, the male sat in the tree top acting as a sentry. When the female had finished feeding, she switched positions with the male, assuming the sentry position. All the while a constant exchange of call notes was given by the birds. They fed only on the new cones of the current growing season and did so by clipping the cone from the tree, then sitting on top of the cone and holding it with their feet while feeding on the contents.

Another small group of crossbills was found on this date scattered throughout the trees down the mountainside near the seedling area. Four males and one female were seen and it sounded as though all of the males were trying to secure this female as a potential mate. The males were observed singing while perched and in flight. The song was loud and clear, of a typical finch-like quality, beginning with an introduction of call notes, proceeding in a variety of warbling messages, and then ending the song with the call notes. A male perched high in a dead tree gave a song which seemed slower and less excited than the flight song. The aerial song was accompanied by a slow circular flight near the female, much like the display of the male American Goldfinch. The first published record of the crossbill's occurrence on Roan Mountain is that of Rhoads (1895) who stated, "the peculiar flight notes of this species were heard near the summit of Roan Mountain, where it undoubtedly breeds."

I would like to express my deepest appreciation to Fred J. Alsop, III for his help in preparing these notes for publication, and to Tom F. Laughlin for his work in the field.

#### LITERATURE CITED

ALSOP, FRED J., III. A Census of a Breeding Bird Population in a Virgin Spruce-Fir Forest on Mt. Guyot, Great Smoky Mountains National Park. *The Migrant*, 41, (3): 49-55.

Burleigh, Thomas D. 1941. Bird Life on Mt. Mitchell. The Auk, 58: 334-345.

Rhoads, Samuel N. 1895. Contributions to the Zoology of Tennessee. No. 2, Birds, Proc. Acad. Nat. Sci. Phila., pp. 463-501.

WILLIAMS, MORRIS D. 1974. The Season. The Migrant, 45: 100.

Biology Dept., Kingsport University Center, University Blvd., Kingsport 37660.

# MINUTES OF THE 1979 SYMPOSIUM AND FALL MEETING

The 13th Annual TOS Symposium and Fall Meeting was held 5-7 October at Gallatin. The meeting of the Board of Directors of the Tennessee Ornithological Society was held 6 October 1979 at the Gallatin Department of Electricity, Gallatin, Tennessee with 33 directors attending, or represented by proxy. The meeting was called to order at 10:45 a.m. by the President, Nelle Moore.

The minutes of the Annual Spring Meeting held 5 May 1979 were read and approved.

#### REPORTS OF OFFICERS

There was no report from the Vice-Presidents.

The SECRETARY, Helen Dinkelspiel, stated for the record that only the Minutes consisting of one book covering 1973 through May 1979 had been received along with Membership files, when the office passed to her.

The TREASURER, Martha Waldron, announced that only the following items were received when the office passed to her:

- 1. Bank statements, cancelled checks, check stubs from Charles Wilmeth, Annella Creech, Ken Dubke and Ray Jordan, former treasurers.
  - 2. Old set of membership cards from Ken Dubke.
  - 3. No books from previous treasurers.

The Treasurer's report (copy of which is attached) showed:

| Cash | on | hand (30 Sept. | 1979)            |          |
|------|----|----------------|------------------|----------|
|      |    | Savings        | 20 1 000 1 000 P | 3,255.64 |
|      |    | Checking       |                  | 253.95   |
|      |    |                |                  | 3,509.59 |

The Treasurer further stated that the Special Committee, consisting of William T. Whitley, Finance Chairman, Nelle Moore, President and Martha Waldron, Treasurer, reinvested the proceeds of five (5) Certificates of Deposit amounting to \$7,136.88 plus interest accrued since the Treasurer's report of May 1978-1979, in InterCapital Liquid Asset Fund, Inc. through Dean Witter Reynolds, Inc. Memphis office. This totals \$7,273 which is earning better than 10% as of this date. Attached is report concerning interest earned on this reinvestment as of 3 Oct. 1979.

The Migrant EDITOR, Gary O. Wallace, sent a report (copy of which is attached) in which he requested discussion on "What Constitutes an Acceptable Bird Record in Tennessee." This discussion resulted in the suggestion that ideas for guidelines for what birds should go on a Tennessee list should be sent to Dr. Wallace.

There was no report from members of the Editorial Staff, Fred Alsop III, The Season Editor, nor from the State Count Compiler, Richard Lura.

DIRECTOR-AT-LARGE from East Tennessee, Jon A. Koella, in his report commended T.O.S. for its interest in and action taken on conservation and work done on the heronry.

DIRECTOR-AT-LARGE from Middle Tennessee, Michael Dinsmore, stated that he plans to work toward establishing a chapter at Clarksville.

DIRECTOR-AT-LARGE from West Tennessee, Betty Sumara, sent no report.

#### REPORTS OF STANDING COMMITTEES

The names of the Finance Committee were presented, subject to Board approval, as follows: William T. Whitley, Chairman, Dr. James T. Tanner, Richard G. Taylor, Dr. David T. Pitts and Martha Waldron.

Jon Koella moved to approve the members of the Finance Committee as submitted. The motion carried.

Martha Waldron, speaking for William Whitley, Finance Chairman, in his absence stated that the Finance Committee was studying the M.I.T.'s for possible reinvestment.

The CONSERVATION COMMITTEE composed of George Mayfield, Chairman, Arlo Smith and Ken Dubke made no report. However, Dr. Smith commented on the great erosion problem in West Tennessee and stated that the Dept. of Conservation was studying the matter.

#### SPECIAL ASSIGNMENT REPORTS

Charles P. Nicholson, Editor of the newsletter, *The Tennessee Warbler*, stated that the cost of a single issue was approximately \$115 including postage of \$25.

FORAY: There was no report on the 1980 Foray from Charles Nicholson, Director, at the Board of Director's meeting. Announcement was to be made at the afternoon session.

PATCHES, DECALS, AVIFAUNA III: Lil Dubke reported that in 1974 there were 1040 copies of Avifauana III printed at a cost of \$532.20. Mrs. Albert Ganier contributed \$255 toward this printing. Of this number (1040) 111 have been sold and 32 complimentary copies given to Mrs. Ganier and others. At present Lil Dubke has 502 copies on hand, 210 are consigned to chapters and 85 consigned to bookstores and state parks. Dr. Tanner has 100 copies in his possession. Lil Dubke further reported that at this point there is a profit of \$55 on patches and decals.

#### OLD BUSINESS

Discussion of Avifauna IV was deferred to the Spring Meeting at the request of Fred J. Alsop III.

#### **NEW BUSINESS**

CURATOR, Dr. James T. Tanner, sent a letter (copy attached) stating that he had on hand enough copies of back issues of *The Migrant* to last 40 years and because of storage problems asked for recommendations as to disposition of surplus copies.

Charles Nicholson made a motion that effective immediately the surplus copies of *The Migrant* are to be put on sale for 25¢ an issue, plus postage. Copies are to be available at the spring meeting for 25¢ an issue. Remaining copies are to be stored in various sections of the state. The motion carried.

Ken Dubke made a motion that the Editor of *The Migrant*, Gary O. Wallace, be given a Life Membership. The motion carried.

## ANNOUNCEMENTS

An announcement was made that the SPRING MEETING for 1980, Memphis Chapter hosting, was to be held at Reelfoot Lake, 2-4 May.

FALL MEETING: Ben Coffey made a motion that Michael Bierly proceed with arrangements for the Fall 1980 meeting to be held at Montgomery Bell State Park. The motion carried.

The President extended appreciation to the committee in charge of the meeting just held at Gallatin.

The meeting adjourned at 12:35.

HELEN DINKENSPIEL, Secretary

### BOOK REVIEWS

THE WORLD OF ROGER TORY PETERSON / AN AUTHORIZED BIOGRAPHY. John C. Devlin and Grace Naismith. 1977. Quadrangle/The New York Times Book Co., New York. 15 color plates and 12 pages of black-and-white photographs. 266 p. \$14.95. A biography that provides the inside story of the man that has done so much to popularize bird watching. His remarkable career, tracing his rise to success and the various roadblocks he has encountered is described.

This is an enlightening book providing many candid details about the life of Peterson. Sensitive matters such as Peterson's two divorces are handled tastefully. The book is also an introductory to the history of ornithology in the twentieth century.

GARY O. WALLACE

WHERE TO FIND BIRDS IN FLORIDA. Edited by Margaret C. Bowman and Herbert W. Kale II. Florida Audobon Society. 32 p. 1977. This is the third edition of the only bird finding guide for the state of Florida. It was first published in 1963-64, with the title of *Where to Find Birds and Enjoy Natural History in Florida*, edited by Margaret H. Hundley. The second revision occurred in 1971. The booklet is divided into four parts: South Florida, Interior Florida, East Coast, and Gulf Coast. Detailed information for finding birds is furnished for more than 140 locations. This is a very good bird finding guide and any birder planning to visit Florida will benefit from the information it contains.

GARY O. WALLACE

## ROUND TABLE NOTES

WHIP-POOR-WILL FORAY—A Whip-poor-will (Caprimulgus vociferus) foray conducted 5 June 1979 along the north face of Holston Mountain, Sullivan County, Tenn., produced 38 birds. The count began at 2135 EDT near the Big Creek section of South Holston Reservoir. The night was clear with a two-thirds moon shining, temperature 17 C (62 F), and there was little to no wind, making conditions ideal.

The same foray method, as reported in previous years (Herndon, 1959), was employed. The route included U.S. Forest Service Route 4017, shown on most maps as Big Creek Road, then onto Flatwoods Road (Route 87) toward Elizabethton.

The habitat is deciduous forest with intermittent clear cuts (U.S. Forest Service, 1973) producing suitable habitat for the Whip-poor-will (Bent, 1940). Elevation ranges from approximately 547 m (1800 ft) to 699 m (2300 ft).

The census covered 16.8 km (10.5 miles) producing 38 Whip-poor-wills. No birds were sighted and all identified by call. The count ended at 2300 (11:00 p.m.) EDT at the entrance to Sky-Wa-Mo Camp along Route 87 in Sullivan County, Tenn. One Barred owl (*Strix varia*) was heard.

The first foray was conducted 20 years ago by Lee R. Herndon (Herndon, 1959) and subsequent counts continued intermittently through 1969 (Bridgeforth, 1969). Previous counts, with birds expressed in birds per kilometer, have been converted: 2.2 per km in 1959 (Herndon, 1959); 2.9 per km in 1962 (Herndon, 1962); 2.7 per km in 1965 (Smith, 1965); 2.4 per km in 1966 (Dillenbeck, 1966); 1.9 per km in 1967 (Dillenbeck, 1967); 4.6 per km in 1969 (Bridgeforth, 1969). The corresponding figure for 1979 was 2.3 birds per kilometer.

In an address to the Virginia Society of Ornithology in May of 1979, Dr. Maurice Brooks (Pancake, 1979) commented on the Whip-poor-will. In Brook's opinion, the bird is disappearing from its former habitat. Similar Whip-poor-will forays might be intensified by the Tennessee Ornithological Society in an effort to monitor possible population changes of this species. Observers included: Wallace Coffey, Bert Hale, Loraine Hale, and Ken Hale.

#### LITERATURE CITED

BENT, ARTHUR CLEVELAND. 1940. Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds and Their Allies. Dover Publications, Inc., New York 14, NY. p.173.

BRIDGEFORTH, WILLIAM A. 1969. Whip-poor-will Foray. *The Migrant* 40:66 DILLENBECK, MRS. HAROLD. 1966. Whip-poor-will Foray. *The Migrant* 37:42. DILLENBECK, MRS. HAROLD. 1967. Whip-poor-will Foray. *The Migrant* 38:41. HERNDON, LEE R. 1959. A Whip-poor-will Foray. *The Migrant* 30:31.

HERNDON, LEE R. 1962. A Whip-poor-will Foray. The Migrant 33:35.

PANCAKE, JOHN. 1979. Appalachians are changing. *Roanoke Times* 3 June 1979. SMITH, CHARLES R. 1965. Whip-poor-will Foray. *The Migrant* 36:53.

U.S. Forest Service 1973. Unit Plan for Management of the South Holston Unit, Cherokee National Forest. p.46.

KENNETH D. HALE, Route 1, Bluff City 37618. Accepted 16 July 1979.

HUMMINGBIRD USES NEST THIRD YEAR—A Ruby-throated hummingbird (Archilochus colubris) nest at the home of Mr. and Mrs. David Holcomb, Brushy Valley Road, Powell, is of interest for three reasons: (1) The nest is under a carport and beside the door that is the main entrance to the house; (2) The nest, protected from weather by the carport and stored indoors each year after the nesting season, has now been used successfully for three consecutive nesting seasons; (3) The dark specks that gradually form a pattern on the clean wall each year are proof of misinterpretation of an observation on nest sanitation practices of the species quoted by A. C. Bent in his Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds and Allies (1940).



Photo by J. B. Owen

Specks on white wall after young hummingbirds left the nest. The boards are 5½ inches across.

The Holcombs have a rural home in habitat that has attracted hummingbirds in previous nesting seasons and they also provide hummingbird feeders. In 1977 they returned from a vacation to find the nest under construction on a wire bracket beside their door, well away from any vegetation. The bracket is a type sometimes used for hanging flower baskets but has only a rustic bell suspended by a cord from its end. The bracket is removed from the wall after nesting is completed, and it and the nest are stored indoors until the next spring. When hummingbirds return in the spring, a female has been observed to go directly to the nest as if she knew where it was. She adds more plant down and fresh covering of lichens, except on the bottom. This results in the nest being noticeably larger each year.

Bent quotes a statement that: "In cleaning the nest, the Ruby-throated Hummingbird places the droppings of the young in a line on the same branch, just above the nest." The Holcombs have not observed what happens the first two or three days but after that time, specks begin to appear on the white wall, which is about seven inches away at its closest point. And frequently, the young have been seen to raise their rear ends and forcefully eject the excreta clear of the nest, which always appears to be clean. Skutch, in his *The Life of the Hum*-

mingbird (1973) mentions observing similar behavior in Costa Rica.

J. B. Owen, 2930 North Hills Blvd., Knoxville 37917. Accepted 15 September 1979.

BROWN CREEPER NESTING IN WEST TENNESSEE—On 14 May 1979 in the Tigrett Wildlife Area, Dyer County, I observed a pair of Brown Creepers

(Certhia familiaris) carrying food behind loose bark on a dead tree, then emerging without the food. Since the tree was in 3 feet of standing water, I returned the next day with a 16-foot extension ladder and with my son to assist me. As I prepared to photograph the nest, containing four juvenile Brown Creepers, a fifth appeared from somewhere on the trunk and perched two feet from me. I took several photographs of it before it flew to another tree about five yards away and started hitching up the trunk. As I was descending, I saw one of the young creeping up the trunk, and while leaving the area we saw three adults chasing each other around the trunk of a tree.

The nest tree was a dead snag about 35 feet high. The nest was approximately 13 feet above the water and located behind loose bark. This tree was about 15 yards from the tree where I observed Brown Creepers carrying nesting material to underneath loose bark, 29-30 April-1 May 1977. That nesting attempt was abandoned. (Migrant 48:74-75, 1977). The locality is about three miles southeast of Ro Ellen, in the bottomlands of the North Fork, Forked Deer River; elevation 260 feet above sea level.

A pair of Brown Creepers fledged at least five young at Radnor Lake, Nashville, 16 May 1976, as noted in *American Birds* (1976:968) and credited to Frank and Karen Ritter and Michael L. Bierly. Previously, all state nesting records were in the higher areas of East Tennessee. First reports of nests there appeared in *The Migrant* of September, 1938 (IX:43 and 55-66) with two photographs of the first nest and another photograph of Albert F. Ganier climbing a dead spruce to a nest 60 feet above the ground.

Ben B. Coffey, Jr., kindly advises that U.S. National Museum Bulletin 195 ('Bent') mentions a single breeding record for extreme southeastern Missouri, which was for the former 'sunken lands' about the turn of the century and just across the Mississippi from Dyer County. In the last ten years a few reports from southern Illinois and elsewhere, in *American Birds*, indicate to him that this species is slowly extending its summer range south in the Mississippi Valley.

WILLIAM G. CRISWELL, Route 4, Dyersburg 38024. Accepted 6 June 1979.

A SNOW BUNTING IN KNOX COUNTY—On 7 January, 1979, I saw a Snow Bunting (*Plectrophenax nivalis*) in Knoxville, Tennessee. To my knowledge, this is the first reported sighting of a Snow Bunting in Knox County. The bird was seen on the Sequoyah Little League Field located on Cherokee Boulevard 1.3 miles from the intersection of Cherokee and Kingston Pike.

The bird first attracted my attention because it was larger than any of the other locally abundant sparrows. The head had a reddish-brown crown, white areas above the eye, a reddish-brown ear patch, and a dark gray area through the eyes. The bill was short, conical, and yellow. The breast was gray and unstreaked and had two reddish-brown splotches just ahead of the folded wings. The visible primaries on the folded wing were black; the coverts were brown with black mottling. A large white wing patch was present; this patch was so distracting that the outline and other characteristics of the bird could not be discerned while the bird was in flight. The back was streaked with black and the feet were black. The Birds of North America by C.S. Robbins, B. Bruun, and H.S. Zim (1966, Golden Press, N.Y.) was used to aid in identification of the bird.

The field in which the bird was found was very wet from rain that had fallen in the early morning hours and from snow that had fallen on the previous Friday (5

January). Throughout the period of my observations, about 15 minutes total, the bird never left the dirt part of the infield. I had to approach within six feet of the bird to flush it. Most of my observations were taken from distances of 15 to 30 feet with the aid of 7 x 35mm binoculars.

I wish to thank Dr. J.T. Tanner for his criticism of the rough draft of this report.

MICHAEL C. SLOAN, Graduate Program in Ecology, 408 10th Street, University of Tennessee, Knoxville, 37916. Accepted 9 Feb. 1979.

EARLY RECORDS OF THE MISSISSIPPI KITE AND A SUMMARY— Samuel N. Rhoads (Contributions to the Zoology of Tennessee, No. 2. Birds. 1895, Proc. Acad. Nat. Sci. Phila.) gives a personal record of the Mississippi Kite (Ictinia mississippiensis) near Raleigh (now a part of Memphis) and "secondhand" records of this species and the White-tailed Kite (Elanus leucorus) by a hunter, for Haywood and Lauderdale Counties. Albert F. Ganier and I considered these published records as very untrustworthy. The first modern published record of the Mississippi Kite for Tennessee was of two seen in the Ensley bottoms by Earl Henry and this writer 21 May 1932 (The Migrant 3 (3): 36). Frequent references to this species followed in these pages, for four principal Shelby County localities. Later, we found it regularly at Meeman-Shelby Forest State Park. Apparently the first authentic record for Tennessee has been unpublished. The late Albert F. Ganier advised me, 4 February 1930: "On August 9, 10, and 11, 1926 I covered about 240 miles of the N. C. & St. L Rwy on an open motor car, from Murray, Ky. to Memphis and from Lexington to Perryville, and back, listing 44 species of birds along the right-of-way. I kept a particularly close lookout for the Mississippi Kite and was rewarded by recording the two mentioned. The first . . . was between Timberlake and Wildersville (milepost 110.5). The second . . . was directly over me and 1/4 mile east of Hatchie Station (about one mile east of the Hatchie River) . . . the environment was excellently adapted to its needs. The following February I searched the locality and found two old nests which were doubtless of this species.

"The above are the only records for Tennessee except those I have observed at Reelfoot Lake."

In my copy of Ganier's "Preliminary List of the Birds of Tennessee" (Dept. Game and Fish 1917) I had penciled in the two 11 August 1926 records and also "1, seen Reelfoot Lake—May" without the year or additional details. This would have to be previous to 1932. The N. C. & St. L R. R. was later incorporated into the L. & N. R. and much of the tracks removed. The Hatchie Station record was in the southwest corner of Madison County, the second locality was in north central Henderson County.

More recent reports and county 'firsts' include the following. Lauderdale County: 1, 15 June 1952, Barr Area, BBC and R. Demett Smith, Jr. Dyer County: 2, 20 July 1957, 7 miles south of Dyersburg, Dr. and Mrs. Fred W. Loetscher, Jr. of Danville, Kentucky; we had the species west of Finley regularly, from 21 May 1960. Obion County: one studied, 18 July 1957, six miles north of Samburg, Dr. and Mrs. H. H. Axtell, of Buffalo, N. Y. On 24 May 1959 I saw one in that same area and from the T. O. S. meeting of 6 May 1961 the kites have appeared regularly on our field days at Reelfoot Lake. At least two (BBC) of the three 1961 birds were in Lake County. Tipton County: one at Gilt Edge, 18 August 1968, by Alice Smith. Haywood County: one, Hillside area, 15 June 1974, Jerald Ledbetter,

compiler. Hardeman County: one, 27 June 1976, west of Teague, by Allan Larrabee and Russell Jones; this spot is about 7 miles east, while Hillville is 6 miles west of Ganier's Hatchie Station record. Across the Mississippi River in Crittenden County, Arkansas, records appear on our field cards, from 16 Aug 1936 but undoubtedly birds from two Shelby County areas at the river, have soared across repeatedly, since 1932. Our first for Kentucky Bend, Kentucky, were four on 1 July 1962.

Records are given above for ten West Tennessee counties but the species is regularly found only in Obion County and the five Mississippi River counties. This should change soon—if the destruction of bottomland hardwoods can be stopped. The last four or five seasons have witnessed an increase and spread of this kite in Shelby County. As I write this (early September, 1979) we have been getting repeated calls from persons who have seen numbers of the kites circling over various parts of Memphis, including Coffey Grounds.

Ben B. Coffey, Jr., 672 N. Belvedere, Memphis 38107. Accepted 18 Sept. 1979.



#### THE SEASON

FRED J. ALSOP, III, Editor



NESTING SEASON: 16 May - 31 July, 1979

With the emphasis of this season's observations focused on the reproductive efforts of the successful nesting of Tennessee's avifauna nothing is more proper nor more exciting than the reports of the successful nesting of two pairs of Ospreys—a bird on the State's endangered species list—in the Eastern Ridge and Valley region. This event is further highlighted by the presence of other Ospreys in that area, at least one pair of which attempted nesting, and the pioneer efforts of Don Hammer and TVA in hacking transplanted Ospreys to-the-wild along the Tennessee River system. Ospreys also nested successfully at Reelfoot Lake.

Black-crowned Night Herons nested at the Bordeaux colony in the Central Plateau and Basin and in Knox County the Concord colony moved across the lake and nested. Yellow-crowned Night Herons nested in the Eastern Mountain Region and Least Bittern nests were reported from the Western Coastal Plain.

The nests of Chuck-will's-widows were discovered in the Western Coastal Plain. Blue-winged Teal and Spotted Sandpipers nested in the Central Plateau and Basin where the Song Sparrow continues to become better established as a breeding species and where Bewick's Wren was reported from several locations. Tree Swallows nested in the Eastern Ridge and Valley where efforts by birders to locate territorial Grasshopper Sparrows produced good results. In the Eastern Mountain Region territorial Swainson's Warblers were located at a new site in Carter County and the Alder Flycatchers were found on Roan Mountain for the second consecutive nesting season.

Good numbers and varieties of shorebirds were reported in the two central regions of the state, both of which produced Willets. A Ruddy Turnstone was seen in late May at Gallatin and Red Knots were seen there as well. The knots are the seventh record for Tennessee. A Northern Phalarope was seen at Kingston in the Eastern Ridge and Valley. June birders found a Laughing Gull in the Central Plateau and Basin and a Least Tern in the Eastern Ridge and Valley. Common Loons remained late in both of these regions as well.

Other observations demanding a particular introductory note include at least seven Painted Buntings in the Memphis area; summering Bald Eagles in the Eastern Ridge and Valley; Chestnut-sided Warblers at "low" elevations in the Chattanooga area; and a Hermit Thrush in early June on Roan Mountain. Many other valuable and interesting records follow.

WESTERN COASTAL PLAIN REGION—Rainfall was a little above aver-

age. Low lying areas in Lauderdale and Lake County were observed several times this summer and the observations produced a variety of shorebirds. There were Stilt Sandpipers, Least Sandpipers, dowitchers, Pectoral Sandpipers, Little Blue Herons, Great Egrets, and Cattle Egrets. The Mississippi River was high for a longer period of time this season. This may have affected the nesting of Least Terns as compared to previous years.

#### Heron-Chuck-will's-widow:

#### LITTLE BLUE HERON

| Date   | Adult | Pied            | Immature |  |
|--------|-------|-----------------|----------|--|
| 18 Jun | 6     | _               | <u></u>  |  |
| 26 Jun | 11    |                 | <u> </u> |  |
| 30 Jun |       | 4               | , —      |  |
| 3 Jul  | 35    | 3               | 7        |  |
| 7 Jul  | 36    | 1               | 33       |  |
| 8 Jul  | 54    | _               | 41       |  |
| 10 Jul | 4     | 1               | 4        |  |
| 14 Jul | 25    | 1               | 28       |  |
| 31 Jul |       | ost, 95 in area |          |  |

\*All observations by Celia Hudson

Yellow-crowned Night Heron: 6 June (40+ nests), SFSP (TWRA and SFSP personnel). Least Bittern: 23 May (nests: 4 eggs; 4 eggs; 5 eggs) Hooper Marsh, Tatumville, Dyer Co. (WGC). Mississippi Kite: 3 Jun - 31 Jul (1-4) North Dyer Co. (WGC); Several locations in Memphis were observed from 4 Jun to 21 Jul. The areas produced 1 to 10 kites on several days. On 21 Jul, 10 kites were observed in the air at one time, 3 were juveniles (JS), 14 Jul (6) Wardlow's Pocket (MLB, JM). Lesser Scaup: 27 Jun (1 male) T (BBC, LCC). Killdeer: 23 Jun (nest with 4 eggs) PF (DW). Common Snipe: 26 May (1) Hooper Marsh, Tatumville, Dyer Co. (WGC). Caspian Tern: 28 Jul (6) Island 13 (CB, JG, MW). Black Tern: 28 Jul (17) T (CB, MW), 27 Jul (2) PF (RP). Chuck-will's-widow: 2 nests: 1 Jun w/1 young approx. 100 yards from another nest with eggs found 17 May; hatched between 5 and 7 Jun, North Dyer Co. (WGC).

Wren-Bunting: Carolina Wren: Observations show that this wren was fairly common in Shelby Forest State Park and Overton Park for the months of Jun and Jul, but rare to uncommon elsewhere in West Tennessee. Bewick's Wren: 22 June 3.5 mi. SE of Finger, McNairy Co, Rd 8083 (BBC). House Wren: first seen 14 Apr. The pair was nesting for the third time on 28 Jul. This is the fourth year in a wren box hanging about 6 ft. above the ground in a maple tree D (MHB), 6 Jun - 3 Jul (2 building nest) M (MD), 22 May - 10 Jul (2 singing) T (BBC), 1 Jul (3 singing) T (BBC), 19 Jun (1 singing) C (AS). Black-and-white Warbler: 17 Jul (1) OP (VJ), 31 Jul (1) D (RH). Swainson's Warbler: Apr thru Jul last seen 2 Aug, third summer in Overton Park (BBC). Worm-eating Warbler: 15 Jun (1) SFSP (BBC). Tennessee Warbler: 22 May (2) D (CH). Nashville Warbler: 17 May (2) D (CH). Yellow Warbler: 6 May (1) D (CH), 14 Jul (1) M (JGH). Magnolia Warbler: 25 Apr (3-4) D (CH); 4 Jun (1) Overton Park, M (BBC)—latest by 4 days. Wilson's Warbler: 2 May (2) D (CH). Blue Grosbeak: 27 Jul (2) PF (RP). PAINTED BUNTING: 4 Jul (5) PF (JGH), two buntings at other sites in NW Memphis.

Observers: CB—Carolyn Bullock; MHB—Mrs. Harry Brooking; BBC—Ben B. Coffey, Jr.; LCC—Lula C. COffey; WGC—W. G. Criswell; MD—Mary

Davant; MLB—Michael L. Bierly; CH—Celia Hudson; RH—Russell Hudson; JGH—James G. Holt; VJ—Victor Julia; JM—Joe McLaughlin; RP—Rob Peeples; AS—Alice Smith; JS—John Stokes; MW—Martha Waldron.

Locations: C—Covington, TN.; D—Dyersburg, TN.; Island 13, Lake County; M—Memphis; OP—Overton Park; PF—Penal Farm, Shelby County, TN.; SFSP—Shelby Forest State Park; T—Tiptonville area, Lake County; WP—Wardlow's Pocket, Lauderdale County, TN.

Martha Waldron, 1626 Yorkshire Drive, Memphis 38117.

CENTRAL PLATEAU AND BASIN REGION—Temperatures for the period were below normal and precipitation normal.

Loon-Coot: Common Loon: to late Jul Percy Priest L (max 3, winter plumage) JP, species at least partially summered on this lake in 1975 and 1977. Double-crested Cormorant: 12 Jun Gallatin Steam Plant (1) DPC. Great Egret: 2-24 Jul Murfreesboro (1) AH, WH; 24 Jul Nash (1) MLM. Black-crowned Night Heron: The Bordeaux Heronry was again active and successful. At least 50 nests were active. No actual count was made because of disturbance to the birds. Blue-winged Teal: 28 May Hillsboro, Coffee Co (2 adults + 6 young) ER. American Coot: 15 Jul Cold Hollow, Center Hill L (3) RJM; all summer Morris Ferry Boat Dock, Woods Reservoir (1) CSB.

Plover-Sanderling: The shorebird migration peaked in late May with 1000+ on 28 May and an actual count of 681 peeps still present on 30 May, all at the Gallatin Steam Plant, DPC. This is unprecedented numbers for this location and date. Semipalmated Plover: 15 May (114), 28 May (15) Gallatin Steam Plant, DPC; 11 Jun Gallatin Steam Plant (2) DPC. Black-bellied Plover: 29 Jul Gallatin Steam Plant (1) DPC, DRJ, KD, earliest fall Nash area by 5 days. RUDDY TURNSTONE: 21 May (1), 28 May (7) Gallatin Steam Plant, DPC, 3rd & 4th spring records for Nash area. 29 Jul Gallatin Steam Plant (1) DPC, 7th fall record Nash area. Common Snipe: 12-27 Jun Metro Center, Nash (1) DV, first June record Nash. Upland Sandpiper: 9-22 Jul Metro Airport, Nash (1-8) MLM, RM, JS. Spotted Sandpiper: 15 Jun Metro Center, Nash (1 adult + 3 young) DV, seen most of June, 3rd nesting record Nash and same site as in 1977. WILLET: 28 Jul Metro Center, Nash (1) EQ, JB. RED KNOT: 28 May Gallatin Steam Plant (7) DPC, 2nd Nash area record and 7th Tenn record. White-rumped Sandpiper: 17 May - 12 Jun Gallatin Steam Plant (1-6) DPC. Baird's Sandpiper: 4 Jun Gallatin Steam Plant (2) DPC. Dunlin: 26 Apr - 28 May Gallatin Steam Plant (max 32) DPC, unprecedented spring occurrence Nash area. Semipalmated Sandpiper: peak—Gallatin Steam Plant 27 May (56), 28 (200+), 30 (613), 31 (99) DPC. Sanderling: 28 May Gallatin Steam Plant (16) DPC; 28-30 Jul Gallatin Steam Plant DPC.

Gull-Robin: LAUGHING GULL: 9 Jun Gallatin Steam Plant (1) DPC. Common Tern: 24 Jul Old Hickory L (3) DPC; 29 Jul Percy Priest L, Rutherford Co (1) AH, BH, GMB. Caspian Tern: 9 Jul dam, Percy Priest L (1) MLM, 31 days earliest fall Nash area. Black Tern: 25 Jul Gallatin Steam Plant (4) DPC; 25 Jul Fall Creek Falls State Park (12) MOP. Least Flycatcher: 21-22 May Clarksville (1 singing) DS, FMF, DR. Olive-sided Flycatcher: 27 May Shelby Bottoms, Nash (1) MPS; late. House Wren: At least one male present all summer Columbia. Property owner said present 1978, but no confirmed nesting yet Columbia, GRM. Bewick's Wren: 15 Jun Dixon Spring (1) CPN, not present 11 Jul; during period

Nash, one location 2 birds DV and Gallatin three locations, 5 birds DPC. American Robin: Jul Murfreesboro (1 completely albino with pink eye) AH.

Warbler-Sparrow: Golden-winged Warbler: 2-16 Jun Lewis Co (1 male singing) GRM, same site as 1978, no female seen, no known nesting records on the Western Highlands Rim. BREWSTER'S WARBLER: 17 Jul Cheatham Co (1) AFS, KH, few Tenn. summer records. Cerulean Warbler: 3 Jul Woodbury (1 in bird bath) FB. Wilson's Warbler: 28 May Shelby Bottoms, Nash (1) MPS. Dickcissel: 8 Jul Winchester (3) RL, MBH. Song Sparrow: Two Nash nesting colonies thriving; 13 Jul dam, Center Hill L (2 adults feeding young in nest) MRM.

Observers (alphabetically beginning first initial: AFS—A Floyd Scott; AH—Anne Hettish; BH—Bob Hettish; CPN—Charles P Nicholson; CSB—Carroll and Stanley Barr; DPC—Dot and Paul Crawford; DR—Debbie Roberts; DRJ—Daniel R Jacobson; DS—David Snyder; DV—David Vogt; EQ—Elizabeth Queener; ER—Erma Rogers; FB—Frances Bryson; FMF—Floyd M Ford; GMB—Glen and Maria Birdwell; GRM—George R Mayfield; JB—Jane Bridgman; JP—Jimmy Parrish; JS—John Sellars; KD—Kathy Davidson; KH—Kay Harker; MBH—Marjory B Harper; MLM—Margaret L Mann; MOP—Marge and Oscar Patrick; MPS—M Pat Stallings; MRM—Mac and Ruth McMillan; RJM—Rocky J Milburn; RL—Ruth Luckado; RM—Ruth McMillan; WH—Wilma Hunter.

MICHAEL LEE BIERLY, 3825 Bedford Avenue, Nashville 37215.

EASTERN RIDGE AND VALLEY REGION—This has been one of the most significant seasons the compilers can remember. Many years have been spent in monitoring the reproduction of the small Osprey population and 1979 was the finest ever recorded. A large measure of the success is due to the vigilant, tireless, efforts of Don and Joan Hammer in closely watching the pairs and preventing unwarranted human disturbance. In addition, Don was instrumental in organizing the Osprey hacking program. A large measure of the success in educating the public can also be directly attributed to the wide distribution of the Osprey-Eagle folders contributed by the TOS.

Those observers that closely watched the Kingston Steam Plant for shorebirds were not disappointed. Numbers peaked on 28 May when an unprecedented 625 Semipalmated Sandpipers were tallied.

Field workers in Elizabethton, Knoxville and Tony Koella in Jefferson County have searched for and recorded more Grasshopper Sparrows than were previously realized to be in the area. In order to determine the sparrow's true status it would qualify as a fine target species to survey on a statewide basis in 1980.

Loon-Hawk: Common Loon: 14 Jun (1) FLL (PP); 28 Jun (1) DL (PP). Double-crested Cormorant: 1 to 5 regular to 29 May HRA (KLD, Randy C. Stringer); 4 June records FLL (PP). Little Blue Heron: 11 Jul (1) NoL (JCH). Cattle Egret: 26-29 May (1) BL (Pete Range); 31 May (1) SB (KLD); 18 Jul (1) KSP (LT). Great Egret: 9 Jul (1) Grainger Co. (PP); 24-31 Jul (1) Eagle Bend Fish Hatchery (LT). Snowy Egret: 24 Jun (1) JCo (TK). Black-crowned Night Heron: the colony at Concord moved across the lake to Friendsville; move caused by house building in colony area (CPN et al); an attempted relocation of the Cherokee Lake colony was partly successful in that the birds moved, but did not settle at the selected site due to interference by boat campers. Relocation effort carried out by

Burline Pullin and TVA personnel. Yellow-crowned Night Heron: pair present at Knoxville throughout summer (fide CPN); 1 south of Knoxville in Blount Co. 16 Jun (JCH); and 1 immature at KSP 24 Jul (SBS). Ring-necked Duck: 1 summered on pond near JC (RK, SG, MD). Lesser Scaup: 1 summered on pond near JC (RK, SG, MD). Sharp-shinned Hawk: 19 May (1) JC (RL); 30 May (1) JC (GE); 23 Jun (1) Maynardville (JCH); reported during Jun, Campbell Co. (LT). Cooper's Hawk: 8 Jul (1) JC (RK). BALD EAGLE: one on NoL during Jun (fide JMC); 9 Jul (1) (JCH) and 15 Jun (2) over the French Broad River at Joppa (PP). OSPREY: two nests on Watts Bar Lake that produced 3 young each, plus a third pair that made feeble efforts to nest. In addition, four young were transplanted from Maryland to artificial nest platforms on NoL and Chickamauga Lake where they successfully fledged (Don Hammer, KLD). 4 Jul (1) FLL (MaD). 26 May, 1 Jun (1) DL (TK).

Coot-Owl: American Coot: 1 Jun (1) AS (MD), Piping Plover: 24 Jul (1) KSP (SBS, KLD). Black-bellied Plover: 22 May (1) KSP (KLD). Am. Woodcock: 3 Jul Amnicola Marsh (LD). Spotted Sandpiper: 2 Jun (1) KSP (KLD); 27 Jul (1) SJP (MD). Solitary Sandpiper: 19 Jul (1) Clinton (LT). WILLET: 22 Jul (1) FLL (PP). Greater Yellowlegs: 18 Jul (1) KSP (SBS). Lesser Yellowlegs: 31 May (1) SB (KLD); 10 Jul (5) KSP (KLD); 27 Jul (1) SJP (MD). Pectoral Sandpiper: 18 Jul (1) KSP (SBS, MaD, LT). Least Sandpiper: 16 May - 2 Jun (1-2) KSP (KLD): 16 May (1) AS (RK); 18 Jul (1) KSP (SBS, MaD, LT). Dunlin: 28 May (2) KSP (KLD). Dowitcher sp.: 29 Jun (2) KSP (LT, MaD); 23-24 Jul (4-7) KSP (KLD). Semipalmated Sandpiper: 22 May - 2 Jun (17-625) KSP (KLD); 10-31 Jul (5-15) KSP (KLD). Western Sandpiper: 22-28 May (1-4) KSP (KLD). Sanderling: 28 May (1) KSP (KLD). NORTHERN PHALAROPE: 22, 26 May (1) KSP (KLD). Ringbilled Gull: 26, 28 May (4-1) KSP (KLD). LEAST TERN: 5 Jun (1) SB (KLD). Caspian Tern: 28 May (2) KSP (KLD); 29 Jun, 18 Jul (4) KSP (SBS, MaD, LT, Bob Beck). Black Tern: 3 Jun (1) SB (KLD); 21-27 Jul (4) SB (KLD); 26 Jul (1) Blount Co. (JCH); 29 Jul (1) KSP (SBS). Yellow-billed Cuckoo: Nicholson offered interesting comments on his Breeding Bird Surveys saying they showed no trends. One count had an all time high, one an all time low and the third was stable! Black-billed Cuckoo: 22 Jul (1) KSP (TK). Barn Owl: 3 Jul (1) Amnicola marsh (KLD).

Woodpecker-Wren: Red-headed Woodpecker: observed at 3 localities around Knoxville (CPN et al). Willow Flycatcher: 28 May (1) a new location near Oliver Springs (JMC); 2-3 pairs nesting AS (RK et al). TREE SWALLOW: abandoned nest with eggs at Norris (CPN, Gordon Hall) and 20 Jun adult with 3 young at Louisville (MaD). Bank Swallow: 2-4 birds seen irregularly at AS, but no nest located (GE et al). Cliff Swallow: nesting at Cherokee Dam, US 11-W bridge, Bean Station & US 25-E bridge near German Creek (CPN, PP); 8-10 nests in a barn near JB (RK). Purple Martin: 30 Jul (10,000) HRA (KLD). House Wren: Jo Stone reported one individual carrying nesting material at his home in Chattanooga on 10 June. No other evidence of nesting reported.

Waxwing-Sparrow: Cedar Waxwing: 17-19 May (15) PP (KD); nested Norris (CPN). Loggerhead Shrike: at least 3 nesting pairs near JB (RK). Prothonotary Warbler: 1-3 birds seen along the Watauga River during the period, but still no nesting reported (ETOS). Golden-winged Warbler: one at Kingston on 24 Jul was probably an early migrant or wandered from the nesting population on the Cumberland Plateau (SBS). Chestnut-sided Warbler: one on the Signal Mt. Breeding Bird Count at a low elevation along the Tennessee River on 3 Jun (LD); on a return trip 12 Jun the bird could not be located (KLD); on 10 Jun one was observed singing in

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Point Park from the very same perch used by individuals in both 1976 and 1977 (KD). These seem to be very strong clues for observers to watch for nesting of the Chestnut-sided any place on the Cumberland Plateau. Bobolink: 21 May (1) SB (KLD). Northern Oriole: singing male in Knoxville during Jun (A. Boyd Sharp); 21 May (2) JCo (TK). Rose-breasted Grosbeak: 4 Jul (pair and 1 immature) 1500 feet, Anderson Co. (JMC, JCH).

Grasshopper Sparrow: an intensive search for the species by Knoxville Chapter members turned up at least 20 singing males in Knox Co; Tony Koella had at least 2 or 3 males each singing in 5 fields around his home in JCo and 8-10 nesting pairs have been located in a new site near Jonesboro (RK). Still, only an occasional bird is reported from around Chattanooga (KLD).

Locations: AS—Austin Springs; BL—Boone Lake; DL—Douglas Lake; EB—Eagle Bend Fish Hatchery; FLL—Fort Loudoun Lake; JB—Jonesboro; JC—Johnson City; JCo—Jefferson County; NoL—Norris Lake; PP—Point Park; SB—Savannah Bay; SJP—St. John's Pond.

Observers: Campbell, James M.—JMC; Davis, Marcia—MaD; Dillenbeck, Martha—MD; Dubke, Kenneth H.—KD; Dubke, Kenneth H. and Lillian H.—KLD; Dubke, Lillian H.—LD; Elizabethton Chapter, TOS—ETOS; Eller, Glenn D.—GE; Goodin, Sally—SG; Howell, Joseph C.—JCH; Koella, Jon A. "Tony"—TK; Knight, Rick—RK; Lewis, Richard—RL; Nicholson, Charles P.—CPN; Pardue, Paul—PP; Stedman, Stephen J. and Barbara—SBS; Turner, Linda—LT.

Kenneth H. and Lillian H. Dubke, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION—The occurrence of Alder Flycatchers on Roan Mtn. again this year is another step in the continuing expansion of their breeding range. No shorebirds of any species were reported from this area during the period which seems somewhat unusual. The report of a Virginia Rail climbing a coniferous tree high in the Great Smoky Mountain National Park is unusual.

The weather was very wet throughout the period as June and July both received above average amounts of rainfall. The temperature was mild throughout the entire period.

Heron-Owl: Yellow-crowned Night Heron: 2 nests reported last period fledged at least 4 young HS (HF, GE). Wood Duck: a very good nesting season as several broods of young observed. Sharp-shinned Hawk: 25 Jun (1), 23 Jul (1) Erw (GS). Cooper's Hawk: 13 Jul (1) RM (MD, SG). Red-shouldered Hawk: 9 Jun (1) E (GW). Virginia Rail: 16 May (1) GSMNP (Larry Gates fide MB). Barn Owl: 13 Jun (1) E (GW). Screech Owl: good nesting results after 2 bad winter periods. Great Horned Owl: several reports during period.

Flycatcher-Kinglet: Olive-sided Flycatcher: 5-6 Jun (4) GSMNP (MB). ALDER FLYCATCHER: 4 Jun thru end of period (3-5) RM (ETOS). Common Raven: 1-5 seen regularly thru-out period on RM and IM (ETOS). Black-capped Chickadee: 5-6 Jun (3-5) GSMNP (MB). Red-breasted Nuthatch: above average numbers seen on RM and GSMNP above 4,000 ft. (ETOS, MB). Winter Wren: average numbers on RM (ETOS). HERMIT THRUSH: 7 Jun (1) RM (Carolina Bird Club) late date. Veery: 16 May (2) late arrival date RM (RK). Goldencrowned Kinglet: normal numbers reported on RM and GSMNP (ETOS, MB).

Warbler-Sparrow: Swainson's Warbler: 17 Jun (new nesting site located) WibL (ES). Magnolia Warbler: 29 May (1) RM (ES) last spring report. Blackpoll Warbler: last spring sighting 18 May (1) E (HF). Pine Warbler: 6 Jun (1) GSMNP (MB) late. MOURNING WARBLER: 17 May (1) MC (RL). Blue Grosbeak: 3-4 nesting pairs reported in the area (ETOS). Red Crossbill: 16 May (1) GSMNP (Larry Gates); 17 May (2) RM (RL). Vesper Sparrow: 17 May (1) and 4 Jun (1) on RM (RL, RK). White-throated Sparrow: last spring sighting 19 May (1) E (GE, HF).

Locations: E—Elizabethton area; ERW—Erwin: GSMNP—Great Smoky Mtns. National Park; HS—Hunter Swamp (near Eliz); IM—Iron Mountain; MC—Milligan College; RM—Roan Mtn.; WibL—Wilbur Lake.

Observers: MB—Mike Bierly; ETOS—Eliz chapter TOS; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; MD—Martha Dillenbeck; RK—Rick Knight; RL—Richard Lewis; ES—Ed Schell; GS—Glenn Swofford; GW—Gary Wallace.

GLEN D. ELLER, Route #3, Grandview Terrace, Elizabethton 37643.

Correction: The Migrant. Vol. 50, No. 3.

p. 71. Reads: "LARK SPARROW: not as common as last previous years at home and farm JCo (TK)."

It should read: "LARK SPARROW: 14 Apr (1) CH (RCS). White-crowned Sparrow: not as common as last previous years at home and farm JCo (TK)."



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